

# Reported discourse and its acoustic/prosodic characteristics in Venezuelan Spanish

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## ABSTRACT

This paper presents partial results of research done on the acoustic / prosodic features that contributed to single out the multiplicity of voices present in the production of reported speech. The fragments analyzed were taken from recordings of twelve female speakers of Venezuelan Spanish. Fundamental frequency, length and intensity were measured on each syllable of the fragments. Results showed that the discourse of the speaker before the direct speech clauses shows a fall in F0 ending in a pause. This in turn is followed by a rise in tone which is higher than the speaker's media and goes on ascending until the end of the clause. Reported discourse showed higher intensity than the actual discourse of the speaker. We found that, as with F0, there was a previous fall all the way to the corresponding pause. On the contrary, the actual reported speech clause, showed a descending curve. Regarding length, both before and in the actual direct speech itself, we found that the clause starts with short-timed syllables that gradually lengthened up to the last syllable and the pause preceding direct speech.

## 1. INTRODUCTION

Discourse analysis, based on bajtinian theory [1] argues the dialogic character of language which is conceived as an exchange between speakers even in its monological forms. This idea is also presented in the notion of *heteroglosia*, seen as the activation of several voices in enunciation, and not only that of the speaker. For this author, *dialogicity* is the essential feature of language and it is realised in enunciation through a multiplicity of voices composed by his/her own voice, in another time and another space, as well as by the voices of others. Ducrot [2] introduces the notion of *poliphony* referring to the subject's doubling, as well as to the evocation of the discourse of the Other not present in the moment of enunciation [3].

The main interest of this paper is precisely this evocation of the voice of the Other, which is considered as reported speech. Our goal is to show the acoustic/prosodic features used to signal the voice of the Other in the discourse. The

fragments studied here are associated to what Authier [4] calls the "shown heterogeneity" and, without expressly distinguishing its various forms (direct and indirect), we will just refer to reported speech. In this type of discourse prosody functions as the main mark, along with some verbal marks.

Interest about the co-presence of other voices together with our own voice is not recent. In Plato's [5] third book of the Republic, Socrates presents the difference between *diegesis* and *mimesis*. In *diegesis* the speaker is the poet, whereas in *mimesis* he tries to create the illusion that he is not the one who speaks. *Mimesis* is therefore the representation or imitation of reality. But in the Poetics, Aristotle [6] does not limit *mimesis* to the representation of discourse and adds to this idea that of imitation of action. In this sense, he understands *diegesis* also as a form of *mimesis*, neutralizing Plato's opposition. Without going into details about the possibilities of meaning in the imitation of the action, we will limit ourselves to the consideration that there are several personae acting in the scene; they speak and gesticulate, in the same way people do in reality.

Moreover, Authier [4] talks about "shown heterogeneity" in order to explain the inclusion of the speech of the Other in our discourse. The discourse process is quotation with clearly defined marks indicating the presence of another speaker. In this type of discourse prosody functions as the main mark, along with some verbal marks.

## 2. SHOWN HETEROGENEITY

Goffmann [7] posits the existence of two worlds in reported speech, the world spoken about and the world of enunciation, something similar to what children do when playing; we could, therefore, interpret textual quotation as a form of play in discourse, in which prosodic contextualization cues serve in this case as psychological frames -in Bateson's [8] sense-, because they exclude everything which does not pertain to the message nor to the action, but includes everything which does, while organizing the perception by the recipient.

Waugh [9] insists that both direct and indirect speech are indexes, in the sense that they are affected by the original

in terms of its representation. According to Waugh, they are iconic, because both claim some similitude between the instance of reported speech and original enunciation. This means that, both in direct and indirect speech, there are iconic indexes, and what makes the difference is the form in which they are iconic. Holt [10] considers that a feature of direct reported speech which indirect reported speech does not share is that prosodic changes can also be used to signal shifting from non reported speech towards reported speech. Prosodic changes would then be a form in which speakers indicate that they are quoting directly.

### **3.- EXPERIMENTAL ASPECTS**

#### **3.1.- Corpus**

The fragments analyzed were taken from recordings of spontaneous speech of Venezuelan Spanish speakers from different regions of the country. Twelve female voices from which 56 clauses of direct reported speech were extracted. The recording was carried out in an anechoic room using the computer program Praat. The digitized signal was segmented into syllables with the help of the spectrogram and, when necessary, the audio signal. Acoustic parameters, corresponding to fundamental frequency, length and intensity were measured on every syllable of the analyzed fragments. Fundamental frequency and intensity were measured at the point of the formantic stability of the vowel, while length corresponded to the duration (in milliseconds) of the whole syllable.

#### **3.2. Results**

##### **3.2.1.- Introductory formula**

The type of reported speech studied presents an introductory formula in about 75% of the cases. This has also been observed in the case of French [11], [12]. In our study this formula corresponds to the type of discourse "el me dijo..." (he told me...), "entonces escuché..." (then I heard...), "fue cuando dije..." (It was then when I responded ...), etc. All of these expressions are related to verbs pertaining to actions such as listening and saying. After this introductory formula comes a pause, with a medium duration of 184 ms., but with very variable individual values. After the reported discourse, a pause may or may not appear. This indicated the non pertinence of the silence after the reported discourse, and hence it was not analyzed.

##### **3.2.2.- Fundamental frequency contour**

Previous to the presence of direct reported speech, the contour of fundamental frequency of the speaker's discourse presents a significant fall ( $p = .0001$ ) (158 Hz-141 Hz), from the last lexical unit to the introductory formula, whether it is present or not. This fall ends in a pause (183,82 ms), after which reported speech starts in a tone

higher than the medium tone of the speaker (167 Hz), which continues to rise until the end. This change in tone interestingly shows the introduction of the Other in the discourse. Direct reported speech presents itself in a higher tone than that of previous or following discourse, a reason for which it could be considered emphatic to the point that, in some of our examples, there is even a change in dialectal intonation showing an emphasis on mimesis. This tonal rise is equally related to a certain form of focalization [13], [10].

##### **3.2.3.- Intensity contour**

As to intensity, and similar to the pattern observed in fundamental frequency, a significant fall can be observed ( $p = .0003$ ) in the presentation (69 db-66 db), the corresponding pause, and a descending curve in proper reported discourse (75db-73db). Subordinate or reported speech shows a lower intensity than main discourse corresponding to the speaker's voice.

##### **3.2.4.- Length**

Variations in length, in the presentation of direct reported speech and in its emission, are shown in clauses starting with short syllables (64,75 ms) which stretch until the final syllable (154,32 ms), and the possible presence of a pause previous to discourse initiation. No differences in rhythm were observed between the voice of the speaker and the presence of the Other in the discourse. This only happens when imitating the Other's dialect.

### **4. CONCLUSIONS**

This study presents partial results of research carried out on the acoustic-prosodic features which contributed to signal the multiplicity of voices related with the production of direct reported speech. Fragments analyzed correspond to 56 discourse samples taken from recorded speech of twelve female speakers of Venezuelan Spanish. After segmenting the signal in syllables with the help of spectrogram and audio, fundamental frequency, length and intensity values were measured in each one of the syllables of the fragments mentioned. F0 and intensity were measured at the point of stability of vocal formants and duration corresponded to the duration in milliseconds for each syllable.

Results showed a fall in F0 (158 Hz - 141 Hz) before reported speech, which ends in a pause (183,82 ms). This tonal fall and the following pause were followed by a tonal rise, higher than the media for the speakers (167 Hz) and continued rising until the end of the subordinate speech clause. This change in tone focalized the entry of the Other in the discourse.

It was also found that subordinate discourse showed less intensity than dominant discourse. We found that, as in fundamental frequency, there was a previous fall all the way to the corresponding pause (69db - 66 db). However, the actual piece of reported speech, on the contrary, showed a descending curve (75db - 73db).

As to length, before and during direct reported speech, it was found that clauses started with short syllables (64,75 ms.) gradually lengthening until the last syllable (154,32 ms.) and the pause preceding dominant discourse.

No rhythm differences were found in general among the voice of the speaker and the presence of the Other.

Results contribute to clarify some aspects of discourse, since they showed that speech representation in dialogue, as Tannen [14] states, is a narrative act, not the inevitable result of the occurrence of speech in the episode. Neither can it be treated as a grammatical incise. It is the representation of another world, as in a play.

It can also be inferred that these entries of subordinate discourse, the discourse of the Other in the dominant discourse, are not exact copies of what is said, but that being iconic, they are probably not identical. The cues found (change in tone, intensity and specific features of length) are probably conventional cues among speakers allowing them to signal voice subordination. They also seem to have a psychological and social reality, because they signal and package discourse [15]. These results would have to be validated in other Spanish material.

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